

I claim:

1. A method for assigning geographically oriented units of a first hierarchical level of a radio communication system to geographically oriented units of at least one second hierarchical level that is higher than the first hierarchical level, which comprises:

setting up functions that specify, as a function of a number of subscribers of a radio communication system, a size of a load, that is selected from the group consisting of a radio load and a switching load, and that is caused by a geographically oriented unit of a first hierarchical level at a node of the radio communication system;

setting up a formula which, using the functions, permits a size of a processing load occurring at each node, in a case of a given assignment of geographically oriented units of the first hierarchical level to geographically oriented units of the second hierarchical level, to be calculated for a given number of the subscribers; and

using the formula to select an assignment that permits a greatest possible growth in a number of subscribers of the radio communication system without a processing load at a geographically oriented unit of the second hierarchical level

exceeding resources of the geographically oriented unit of the second hierarchical level.

2. The method according to claim 1, which comprises using a method of linear optimization to select the assignment.

3. The method according to claim 1, wherein:

the geographically oriented units of the first hierarchical level are units selected from the group consisting of cells of the radio communication system and base stations of the radio communication system; and

the geographically oriented units of the second hierarchical level are units selected from the group consisting of mobile switching center regions, location areas, and base station controller regions.

4. The method according to claim 1, which comprises approximating the functions using linear functions of the number of subscribers.

5. The method according to claim 1, which comprises:

using an existing assignment of the geographically oriented units of the first hierarchical structure of the radio

communication system to the geographically oriented units of the second hierarchical structure as a starting point; and

considering only geographically oriented units of the first hierarchical structure which are situated at a boundary between two geographically oriented units of the second hierarchical structure.

6. The method according to claim 5, which comprises using iteration.